Testimony on S.20

Senate Committee on Health and Welfare

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AIV appreciates the opportunity to provide testimony on S.20. We do not support S.20 as introduced. However well-intentioned some provisions of S.20 might be, the bill has unclear and problematic definitions and scope for chemicals and products it is addressing. It also proposes flawed or insufficient criteria for some of the bans and other regulations it would impose on products that are already regulated.

Although the bill as introduced has serious flaws, several of these can be addressed through amendments. We encourage the Committee, if it wishes to proceed with S.20, to accommodate sufficient testimony and stakeholder engagement to address these issues.

Key Issues and Recommendations

The following are highlights of key problems with the bill and recommended changes. AIV would be happy to work with the Committee and other stakeholders to develop specific amendments:

The definition of PFAS is not technically correct. Moreover, it includes "a chemical compound meant to replace perfluoroalkyl and polyfluoroalkyl substances that has similar chemical properties". The inclusion of "similar chemical properties" raises questions about whether non-PFAS chemicals meant to perform similar functions would also be banned, as well as whether chemicals with properties similar to PFAS unrelated to health concerns would be banned.

The bill should use a clear, specific, and scientifically sound definition of covered PFAS.

The bill would ban the manufacture and sale of covered firefighting foam but with an exception for certain allowable uses. It does not make sense to place restrictions on manufacture and sale if certain uses are allowed. Also, there are additional uses where covered firefighting foam is warranted.

 The bill should focus on allowed and disallowed uses of covered foam and not prohibit manufacture and sale.

The bill defines bisphenols by the function they serve, raising the possibility of confusion about other chemicals.

• The bill should use a clear, specific, and scientifically sound definition of bisphenols.

The definitions of "package" and "packaging component" appear to include items that would not actually be in contact with food, including packaging elements that might have wide uses for products other than food.

• The bill should use a clear definition of covered packaging that actually contacts food.

The bill provides a process for banning bisphenols in food packaging that addresses critical consideration of the availability, affordability, and effectiveness of alternatives, as well as time to transition production, but does not provide such a process for PFAS and phthalates.

- All three chemicals should be subject to the same process as proposed for bisphenols.
- In addition, the bill should allow uses of these chemicals in food packaging if specifically approved by the Food and Drug Administration.

The bill would add the entire class of PFAS to the list of Chemicals of High Concern to Children, which requires extensive testing and reporting of covered products regardless of any exposure or health risks associated with a chemical in any given product. This would add thousands of individual chemicals to test and report on, even though PFAS chemicals do not all share the same potential health risks. In addition, the inclusion of "a chemical compound meant to replace perfluoroalkyl and polyfluoroalkyl substances that has similar chemical properties" expands this scope in potentially broad and unclear ways. Moreover, this would be done without the scientific review and determinations by the Department of Health currently required in the CHCC law, a review and determination process that was recently updated and reaffirmed by the Legislature in statute.

• The bill should strike this section entirely and allow the existing process by which the Department of Health can add chemicals to the list of Chemicals of High Concern to Children to operate as the Legislature intended.

Additional Comments on Defining and Regulating PFAS as a Class

There are several problems with defining and proposing to regulate PFAS as a class in general, both within and beyond the scope of S.20. The proposed definition of "PFAS" covers a wide universe of substances with very different physical, chemical, environmental and biological properties, appearing to attempt to apply to all materials bearing a carbon-fluorine bond. The hazard and risk profiles of these various organo-fluorine substances are either known to be, or expected to be, different. It is our understanding that the scientific studies and toxicological data necessary to support the regulation of PFAS as a class are not available at this time.

Additionally, we believe that the specific definition of PFAS as used in S.20 contains flaws that could lead to unintended consequences. The definition in S.20 reads "class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom or a chemical compound meant to replace perfluoroalkyl and polyfluoroalkyl substances that has similar chemical properties." This is not technically an accurate description of PFAS -- the only fully fluorinated carbon atom is carbon tetrafluoride, CF₄, an inert and non-toxic gas.

Of greater concern, however, as noted above, is that the second half of the definition states that any compound that provides similar chemical functionality to a PFAS substance would by definition be considered PFAS. As written, this definition would have the effect of discouraging the development of benign replacements and at best create confusion about the status of other chemicals currently or potentially in use. For example, the definition as currently written in S.20 could have the effect of classifying an entirely benign non-fluorinated firefighting foam that functions with flame quenching surfactant properties as a PFAS.

More broadly, there are numerous practical difficulties or impossibilities that would be faced by regulators, and the regulated community, if all chemicals containing carbon-fluorine bonds were to be regulated as a single class. Some of the specific practical difficulties with regulating PFAS as a class could include:

 Regulations that have imprecise and ambiguous definitions that do not account for the particular molecular structures and chemical properties of concern will be inherently unworkable and unenforceable.

- Efforts to regulate chemicals for which there are not established, validated, commercially available methods of analysis would be inherently unworkable.
- Regulations that address chemicals as a class would abandon well-established practices of chemical risk identification and management.
- An overly broad definition of PFAS will unintentionally regulate a wide array of chemicals that are not intended to be in the scope of regulations.
- A broad definition would create tremendous new reporting challenges for entities that are in scope.

The scope of PFAS chemicals covered in regulation should be based on the following:

- Regulatory definitions of PFAS should be precise and suited to the objective of the regulation.
- Standardized, validated, cost effective, and commercially available analytical methods should be available before a chemical can be regulated.
- Established chemical risk management practices should be followed to appropriately prioritize and enable measures that protect human health and the environment.
- Better information is needed on the toxicity, bioaccumulation, and persistence of fluorinated organic compounds that might be regulated under a broad regulatory PFAS definition.
- The role of essential PFAS substances to health, safety, and commerce should be recognized, and the elimination of nonessential uses could be encouraged.

Before acting to treat all PFAS the same and regulate as an entire class, the Committee should also review the approach that ANR has taken with the regulation of PFAS compounds as a class or not set forth in the Vermont 2021 PFAS Road Map, and as articulated in its advance notice of rulemaking from August 2020.